

AMENDMENTS TO THE CLAIMS

The following Listing of Claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (original): A method of producing particles comprising the steps of: providing a load stock comprising:
a polymer, a wax and/or a lipid that is a solid at standard temperature and pressure; and
optionally, a biologically active substance;
contacting the load stock with a supercritical fluid to form a melt;
contacting the melt with a polar solvent to form an emulsion, the emulsion having a discontinuous phase comprising the melt and a continuous phase comprising the polar solvent; and
expanding the emulsion across a pressure drop to form solid particles comprising the load stock.

Claim 2 (original): The method according to claim 1 wherein the emulsion is expanded through a heated nozzle.

Claim 3 (original): The method according to claim 1 wherein the solid particles are collected in an expansion vessel.

Claim 4 (original): The method according to claim 3 wherein a stream of inert gas flows through the expansion vessel to remove the expanded supercritical fluid.

Claim 5 (original): The method according to claim 1 further comprising adjusting a rate of expansion of the emulsion across the pressure drop to control the morphology and/or size of the solid particles.

Claim 6 (original): The method according to claim 1 wherein the supercritical fluid is carbon dioxide.

Claim 7 (original): The method according to claim 1 wherein the polar solvent is selected from the group consisting of water and alcohol.

Claim 8 (original): The method according to claim 1 wherein a surfactant is added to the polar solvent before the polar solvent is contacted with the melt.

Claim 9 (original): A method of producing particles comprising the steps of: providing a load stock comprising:

a polymer, a wax and/or a lipid that is a solid at standard temperature and pressure; and

optionally, a biologically active substance;

contacting the load stock with a supercritical fluid to form a melt;

contacting the melt with a polar solvent to form an emulsion, the emulsion having a discontinuous phase comprising the polar solvent and a continuous phase comprising the melt; and

expanding the emulsion across a pressure drop to form solid particles comprising the load stock.

Claim 10 (original): The method according to claim 9 wherein the emulsion is expanded through a heated nozzle.

Claim 11 (original): The method according to claim 9 wherein the solid particles are collected in an expansion vessel.

Claim 12 (original): The method according to claim 11 wherein a stream of inert gas flows through the expansion vessel to remove the expanded supercritical fluid.

Claim 13 (original): The method according to claim 9 further comprising adjusting a rate of expansion of the emulsion across the pressure drop to control the morphology and/or size of the solid particles.

Claim 14 (original): The method according to claim 9 wherein the supercritical fluid is carbon dioxide.

Claim 15 (original): The method according to claim 9 wherein the polar solvent is water.

Claim 16 (original): The method according to claim 9 wherein a surfactant is added to the polar solvent before the polar solvent is contacted with the melt.

Claims 17 and 18 (canceled)

Claim 19 (original): A plurality of particles produced according to the method of claim 1.

Claim 20 (original): A plurality of particles produced according to the method of claim 9.